UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DIETER DOHRING
and
ANTON OTT

Appeal 2006-0568
Application 09/647,130
Technology Center 1700

Decided: November 16, 2006

Before WALTZ, TIMM, and JEFFREY T. SMITH, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal the rejection of claims 1-8, the only claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

INTRODUCTION

The claims are directed to a process for producing laminate coatings. Claim 1 is illustrative:

1. A process for producing laminate coatings comprising the steps of:

a. taking a wet patterned or decorative paper impregnated with a melamine resin;

b) spreading particulate fine aluminum oxide (corundum) onto the still wet paper before drying to pre-treat said paper;

c) pre-drying or pre-condensing said paper;

d) applying a covering layer of fibre material containing melamine resin onto said pre-heated paper; and

e) finally drying the whole, with the covering layer being transparent for viewing of the patterned or decorative paper.

To support the rejections of the claims, the Examiner relies upon the following prior art:

Veneziale, Jr.	US 3,663,341	May 16, 1972
Werz	US 4,153,490	May 8, 1979
Lindgren	US 4,940,503	Jul. 10, 1990

The rejections are as follows:

1. Claims 1 and 5-7 stand rejected under 35 U.S.C. § 102(b) as anticipated by Lindgren;
2. Claims 3 and 4 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Lindgren; and

3. Claims 1, 2, and 5-8 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Lindgren in view of Veneziale and Werz.

In deciding the appeal we consider the issues as presented in the Brief filed November 1, 2004, the Reply Brief filed February 7, 2005, the Examiner's Answer mailed September 8, 2005, and the Second Reply Brief filed November 16, 2005.

We affirm for the following reasons.

OPINION

Anticipation by Lindgren

Appellants do not dispute that Lindgren describes a method meeting steps a) through c) and e) of Appellants' claim 1. Nor is there any dispute that Lindgren describes applying a covering layer containing melamine resin onto the pre-treated paper in accordance with step d). The sole dispute is over the meaning of "fibre material" as used in claim 1. Lindgren describes applying a covering layer of overlay paper to the pre-treated paper. The Examiner finds that the overlay paper is "a covering layer of fibre material containing melamine resin" in accordance with step d) of claim 1. Appellants, however, argue that the paper of Lindgren is not a "fibre material" as required by the claim.

The issue is one of claim interpretation. During examination, "claims ... are to be given their broadest reasonable interpretation consistent with the specification, and ... claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art." *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827, 1830, (Fed. Cir. 2004).

The Examiner finds that the overlay paper is a "fibre material" within the meaning of the claim because it is described as being formed of cellulosic fibers and is referenced as a "wet fiber layer" and "a whole fiber layer" in Lindgren (Answer 4). Indeed such language is used in Lindgren in column 1, lines 38-51 and Example 2 which describe the production of overlay paper from α-cellulose fibers. One of ordinary skill in the art would understand that when Lindgren refers to overlay paper, Lindgren is referring to overlay paper formed from α-cellulose fibers.

Appellants first argue that the dictionary meaning of "fiber" provides an adequate distinction between a "fibre material" as used in the claim and an overlay sheet as described in Lindgren (Br. 4-5). We do not agree because in the claim "fibre" is modified by "material." Those of ordinary skill in the art would interpret "fibre material" not as fibers alone but as a material composed of fibers. Paper is a material composed of fibers.

Appellants next contend that it is apparent from their Specification that the therein described covering layer of fibre material is not a paper sheet (Reply Br. 3). This is because, according to Appellants, the discussion of the prior art in the Specification refers to known laminate coatings including overlay papers having aluminum oxide (corundum) particles on the upper surface whereas when discussing the invention the Specification refers to a covering layer of fibre material and then discusses fibre fleece (Reply Br. 3). Appellants argue that the discussion of the prior art would make no sense if the "covering layer of fibre material" encompassed a paper overlay. We cannot agree. The discussion of the prior art can be distinguished from the invention on other grounds, namely, on the grounds that in the discussed prior art process the aluminum oxide particles are present on the overlay

paper rather than on the decorative paper as claimed. Moreover, the discussion of fibre fleece in the Specification is merely an example of a useful material to which the claim is not limited. Note that claim 2 restricts "fibre material" to "fibre fleece" and, therefore, it is presumed that claim 1 is broader in scope than claim 2. Appellants do not convince us that there is any disclaimer of the broader definition in the Specification or any definition which would exclude overlay paper. There is certainly no express disclaimer. As we have been counseled by our reviewing court, we are to avoid the temptation to limit broad claim terms solely on the basis of specification passages. Absent claim language carrying a narrow meaning, we are told by our reviewing court to only limit the claim based on the specification when there is an express disclaimer of the broader definition. *In re Bigio*, 381 F.3d 1320, 1324-25, 72 USPQ2d 1209, 1210-11 (Fed. Cir. 2004).

The Examiner's determination that the overlay paper of Lindgren is a "covering layer of fibre material containing melamine resin" is reasonable. Appellants have not convinced us of a reversible error in the rejection of claims 1 and 3-7 as anticipated by Lindgren.

Obviousness over Lindgren

The Examiner rejects claims 3 and 4 under 35 U.S.C. § 103(a) as obvious over Lindgren. Claim 3 limits the particle size of the aluminum oxide particles to about 125 μm. Claim 4 limits the density of the coated decorative paper after drying to about 140 to 150 g/m^2.

As pointed out by both the Examiner and Appellants, with regard to particle size, Lindgren discloses the following at column 2, lines 56-64:

> The hard particles can consist of many different materials. It is especially suitable to use silica, aluminum oxide, and/or silicon carbide. Accordingly, a mixture of two or more materials is possible. The size of the particles is important for the final result. If the particles are too big, the surface of the laminate will be rough and unpleasant. On the other hand, too small particles can give too low abrasion resistance. Suitably the average particle size is about 1-80 μm, preferably 5-60 μm.

Appellants argue that this portion of Lindgren teaches away from the use of particles of about 125 μm. We cannot agree. Lindgren indicates that the size is a result effective variable that must be selected to balance roughness and abrasion resistance. As found by the Examiner, the particular size of the particles would be a function of the desired (or needed) abrasion resistance and thus ultimately would depend on the intended use of the laminate assembly (Answer 10). Selecting the size that would produce acceptable roughness and desired abrasion resistance would be within the capabilities of one of ordinary skill in the art. *See In re Huang*, 100 F.3d 135, 139, 40 USPQ2d 1685, 1688 (Fed. Cir. 1996) ("even though applicant's modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within the capabilities of one skilled in the art"). Lindgren does not state that levels above 80 μm are unsuitable or will not work, rather, Lindgren merely says "[s]uitably the average particle size is about 1-80 μm." That one size range is "suitable" does not foreclose other size ranges under the teachings of Lindgren. Therefore, Lindgren does not "teach away" from higher levels such as 125 μm. *See In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994) ("[I]n general, a reference will teach away if it suggests that the line of development flowing

from the reference's disclosure is unlikely to be productive of the result sought by the applicant.").

With regard to the density requirement of claim 4, Appellants argue that Lindgren provides no guidance as to the claimed range (Br. 11). However, the density of the coated decorative paper depends on the density of the paper, the resin, and the amount of particles added. Lindgren manipulates those variables in order to obtain desired properties (*see, e.g.*, Examples 3-6, 15, and 16). Finding the optimum or workable values of surface weights, amounts of particles, and the density dependent thereon would have been within the capabilities of one of ordinary skill in the art.

Obviousness over Lindgren, Veneziale, Werz

The Examiner relies upon Veneziale and Werz to show that it is well known in the decorative lamination industry to use a variety of fibrous materials as overlays including not only cellulose papers but also glass fiber fleece and other materials such as mats, rovings, etc. of glass fiber (Werz, col. 1, ll. 55-59; Veneziale, col. 2, ll. 1-6). Based on this evidence, the Examiner concludes that it would have been obvious to one of ordinary skill in the art to form the overlay layer of Lindgren from these other fiber materials as they are recognized alternatives. The Examiner has found all the limitations in the prior art and a reason, suggestion, or motivation to modify the process of Lindgren, therefore establishing a prima facie case of obviousness based on Lindgren in view of Veneziale and Werz.

Appellants argue that the Examiner's finding that Werz teaches the use of glass fiber fleece as an alternative to an overlay paper is in error. But, as stated by Appellants, what Werz describes is "the use of an overlay paper as a protective layer, which overlay paper consists of non-filled alpha-

cellulose paper or a glass fiber fleece." (Second Reply Br. 5; *see* Werz, col. 1, ll. 55-58: "As the protective layer, there is usually used a clear so-called overlay paper, consisting of a non-filled alpha-cellulose paper or a glass fiber fleece, which is soaked with a thermosetting plastic material, mostly on the melamine basis."). This disclosure of the use of cellulosic paper *or* glass fiber fleece would be understood by one of ordinary skill in the art as describing that one could select either. Werz supports the Examiner's finding that cellulosic paper and glass fiber fleece were recognized alternatives for overlays.

Appellants further argue that the skilled person would not have been motivated to modify the methodology of Lindgren in view of Veneziale or Werz because neither Werz nor Veneziale has anything to do with the problem addressed by Lindgren, i.e., the uneven distribution of wear-enhancing hard particles in a decorative laminate and also because there is no hint that any of the other overlay materials (fiber glass in various forms) mentioned by Veneziale could be successfully employed in the process of Lindgren (Second Reply Br. 3-4). These arguments are not persuasive because the embodiment of Lindgren relied upon by the Examiner incorporates the particles into the decorative layer and the problem of uneven distribution of the particles is solved by adding the particles to a preformed decorative paper impregnated with wet resin and drying only after addition of the particles. Those steps take place before the addition of the overlay and one of ordinary skill in the art would have recognized that it is the earlier portion of the processing that solves the uneven distribution problem. The composition of the overlay is not critical to the solution of the problem.

Appellants further argue that there is no prima facie case of obviousness because Veneziale is concerned with overlay layers made of fiber glass, whereas Lindgren makes no reference to the use of fiber glass as an overlay (Second Reply Br. 2). But as properly found by the Examiner, Werz provides evidence that cellulosic paper and glass fiber fleece were known alternatives for use as overlay materials in decorative laminates.

Appellants have not convinced us of any reversible error in the 35 U.S.C. § 103(a) rejection over Lindgren in combination with Veneziale and Werz.

CONCLUSION

In summary, the Examiner rejected claims 1 and 5-7 under 35 U.S.C. § 102(b) as anticipated by Lindgren; claims 3 and 4 under 35 U.S.C. § 103(a) as unpatentable over Lindgren; and claims 1, 2, and 5-8 under 35 U.S.C. § 103(a) as unpatentable over Lindgren in view of Veneziale and Werz. We affirm the decision of the Examiner with respect to all the rejections.

No time period for taking any subsequent action in connection with this appeal maybe extended under 37 C.F.R. § 1.136(a)(1)(iv)(2005).

AFFIRMED

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